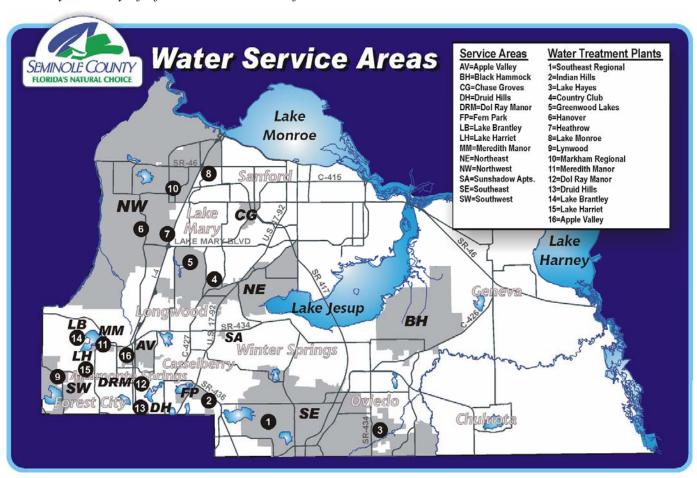
Seminole County is very pleased to provide you with the 2005 Annual Drinking Water Quality Report. We want to keep you informed about the excellent water and services delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. Our water source is deep wells that draw water from the Upper Floridan Aquifer. The water is chlorinated for disinfection purposes and then fluoridated for dental health purposes. Also, the pH of the water is adjusted to protect copper pipes from corrosion.

This report presents 2005 water quality results and what they mean. If you have questions about this report or concerning your water utility, please contact our Report Coordinator at 407-665-2763 or visit our Web site on the Internet located at www.seminolecountyfl.gov/envsrvs/water/.



The Seminole County Environmental Services Department routinely monitors our 14 water service areas (see map below) for contaminants in your drinking water according to Federal and State laws, rules and regulations. Except where indicated, this report is based on the results of our monitoring for the period of January 1 to December 31, 2005. Data obtained before January 1, 2005, and presented in this report are from the most recent testing done in accordance with the laws, rules and regulations.

We at Seminole County Environmental Services Department work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water source, which is the heart of our community, our way of life and our children's future.



# Important Information about your Drinking Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- (A) <u>Microbial contaminants</u>, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (B) <u>Inorganic contaminants</u>, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (C) <u>Pesticides and herbicides</u>, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- (D) <u>Organic chemical contaminants</u>, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- (E) <u>Radioactive contaminants</u>, which can be naturally-occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA)

regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

Drinking water, including bottled drinking water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

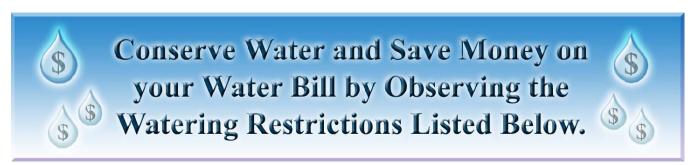
In the table on the next page, you may find unfamiliar terms and abbreviations. To help you better understand these terms we've provided the following definitions:

- Action Level (AL): The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.
- Maximum Contaminant Level or MCL: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- "NA" means not applicable.
- "ND" means not detected and indicates that the substance was not found by laboratory analysis.
- Parts per million (ppm) or Milligrams per liter(mg/l) one part by weight of analyte to 1 million parts by weight of the water sample.
- Parts per billion(ppb) or Micrograms per liter ( $\mu g/l$ ) one part by weight of analyte to 1 billion parts by weight of the water sample.
- *Picocuries per liter (pCi/L) measure of the radioactivity in water.*
- TTHM Total Trihalomethanes



# ENVIRONMENTAL SERVICES DEPARTMENT 500 WEST LAKE MARY BLVD SANFORD FL 32773-7499

# SEMINOLE COUNTY ENVIRONMENTAL SERVICES 2005 ANNUAL DRINKING WATER QUALITY REPORT





- ♦ No watering between 10 a.m. and 4 p.m.
- ♦ Residential customers with <u>odd</u> street numbers water on Wednesdays and/or Saturdays.
- ♦ Residential customers with <u>even</u> street numbers water on Thursdays and/or Sundays.
- ♦ Commercial and other\* customers water on Tuesdays and/or Fridays. (\*Also includes subdivision common areas, schools, churches, government and recreational facilities)
- ♦ Watering may be done at any time with a hand-held hose provided it is fitted with an automatic shutoff nozzle.

Watering Restrictions are set at the maximum recommended watering rate for St. Augustine sod, as determined by University of Florida research. Even during the hottest driest part of the summer, your grass only needs water twice a week, ¾ inch each time.

#### WATER QUALITY TESTING RESULTS - APPLE VALLEY

		Radio	logical Co	ntaminan	ıts								
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination						
Alpha emitters (pCi/l)	10/03	No	2.1	NA	0	15	Erosion of natural deposits						
Radium 228 (pCi/L)	10/03	No	0.5	NA	0	5	Erosion of natural deposits						
	Inorganic Contaminants												
Barium (ppm)	12/05	No	0.0088	NA	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits						
Cyanide (ppm)	12/05	No	0.00601	NA	5	5	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories						
Nitrate (as Nitrogen) (ppm)	6/05	No	0.39	NA	10	10	Run-off from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits						
Sodium (ppm)	12/05	No	12	NA	NA	160	Salt water intrusion, leaching from soil						
	Stage 1 Disinf	ectant/Disi	nfection <b>E</b>	y-Produc	t (D/DB	P) Para	meters						
Haloacetic Acids (HAA) (ppb)	9/05	No	18	NA	NA	60	By-product of drinking water disinfection						
TTHM (ppb)	9/05	No	69	NA	NA	80	By-product of drinking water disinfection						
		Lead a	nd Coppe	r (Tap Wa	ter)								
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination						
Copper (tap water) (ppm)	2004	No	0.945	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives						
Lead (tap water) (ppb)	2004	No	0.0025	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits						
Secondary Contaminants Table													
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Result	Range of Results	MCLG	MCL	Likely Source of Contamination						
Odor (threshold odor number)	2005	Yes	6.9	NA	NA	3	Natural occurrence from soil leaching						

<sup>1.</sup> Value is annual average

An odor violation occurred in December 2005 where the MCL for this parameter was exceeded. There are no serious health concerns associated with these results.

The state allows us to monitor some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

The Source Water Assessment and Protection Program (SWAPP) has completed an assessment and their records indicate no potential sources of contamination. Please see the following site to review the results. <a href="http://www.dep.state.fl.us/swapp/SelectCounty.asp">http://www.dep.state.fl.us/swapp/SelectCounty.asp</a>

<sup>2.</sup> Value is highest detected level

#### **WATER QUALITY TESTING RESULTS - BLACK HAMMOCK**

		Micr	obiological Con	taminants					
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly % Positive Samples	MCLG	MC	EL	Likely Source of Contamination		
Total Coliform Bacteria	2005	No	1	0	Presence of coliform bacteria in 5% or more o monthly samples		Naturally present in the environment		
		Ra	diological Conta	minants					
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination		
Alpha emitters (pCi/L)	1/02 & 3/02	No	2.6	ND - 2.6	0	15	Erosion of natural deposits		
		Ir	norganic Contan	ninants					
Arsenic (ppb)	02/05	No	1.0¹	1.0	NA	10	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes		
Barium (ppm)	02/05	No	0.0161	0.015 - 0.017	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits		
Chromium (ppb)	02/05	No	7.01	6.0 - 8.0	100	100	Discharge from steel and pulp mills; erosion of natural deposits		
Cyanide (ppb)	02/05	No	41¹	ND - 82	200	200	Discharge from steel/metal factories; Discharge from plastic and fertilizers factories		
Fluoride (ppm)	02/05	No	0.8571	0.849 - 0.865	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories		
Nitrate (as Nitrogen) (ppm)	02/05	No	0.031	ND - 0.06	10	10	Run-off from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits		
Selenium (ppb)	02/05	No	3.5¹	3.4 - 4.0	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines		
Sodium (ppm)	02/05	No	38.1¹	37.7 - 38.4	NA	160	Salt water intrusion, leaching from soil		
	Stage 1 D	isinfectant/D	isinfection By-F	roduct (D/DB	P) Para	mete	ers		
Haloacetic Acids (HAA) (ppb)	2005	No	24.6¹	14.7 - 36.1	NA	60	By-product of drinking water disinfection		
TTHM (ppb)	2005	No	57.0¹	50.2 - 66.6	NA	80	By-product of drinking water disinfection		
		Lea	d and Copper (T	<u> </u>					
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL		AL	Likely Source of Contamination		
Copper (tap water) (ppm)	2005	No	0.093	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives		
Lead (tap water) (ppb)	2005	No	1.6	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits		

Value is annual average
 Value is highest detected level

The state allows us to monitor some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

Due to the omission of data on the 2004 Consumer Confidence Report a microbiological monitoring report violation was issued.

# **WATER QUALITY TESTING RESULTS - SOUTHWEST**

		IV	licrobiological Co	ntaminants					
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly # Positive Samples	MCLG	Mo	CL	Likely Source of Contamination		
Total Coliform Bacteria	6/05	No	1	0	bacteria in no mor		Presence of coliforn bacteria in no more than one sample in a month		Naturally present in the environment
			Inorganic Conta	minants					
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination		
Barium (ppm)	5/05	No	0.0082	NA	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits		
Fluoride (ppm)	5/05	No	0.2	NA	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories		
Lead (point of entry) (ppm)	5/05	No	26 <sup>2</sup>	0.8 - 26.0	NA	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder		
Nitrate (ppm)	5/05	No	0.0049	NA	10	10	Run-off from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits		
Sodium (ppm)	5/05	No	12	NA	NA	160	Salt water intrusion, leaching from soil		
	Stage	1 Disinfectar	nt/Disinfection By-	Product (D/DB	P) Para	meters	S		
Chlorine (ppm)	9/05	No	0.7	NA	4	4	Water additives used to control microbes		
Haloacetic Acids (HAA) (ppb)	9/05	No	12.36	NA	NA	60	By-product of drinking water disinfection		
TTHM (ppb)	9/05	No	73.2	NA	NA	80	By-product of drinking water disinfection		
		L	.ead and Copper (	• •					
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination		
Copper (tap water) (ppm)	2003	No	0.92	1	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives		
Lead (tap water) (ppb)	2003	No	6.6	1	0	15	Corrosion of household plumbing systems, erosion of natural deposits		

<sup>1.</sup> Value is annual average

An initial lead analysis in May 2005 indicated an exceedance of the MCL. Per FDEP rules, subsequent lead analyses must be performed for four (4) consecutive quarters beginning in the July-September 2005 period. The county did not sample for this parameter until November 2005. Therefore a monitoring violation for Lead was issued.

The state allows us to monitor some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

The Source Water Assessment and Protection Program (SWAPP) has completed an assessment and their records indicate no potential sources of contamination. Please see the following site to review the results.

Http://www.dep.state.fl.us/swapp/SelectCounty.asp

<sup>2.</sup> Value is highest detected level

#### **WATER QUALITY TESTING RESULTS - SOUTHEAST**

		Radio	logical C	ontaminants								
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination					
Radium 228 (pCi/L)	9/03	No	0.5	0.5	0	5	Erosion of natural deposits					
Inorganic Contaminants												
Barium (ppm)	04/05	No	0.010¹	0.006 - 0.014	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits					
Fluoride (ppm)	04/05	No	0.221	0.21 - 0.22	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories					
Nitrate (as Nitrogen) (ppm)	04/05	No	0.011¹	0.0058 - 0.021	10	10	Run-off from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits					
Sodium (ppm)	04/05	No	20.7¹	11.0 - 36.0	NA	160	Salt water intrusion, leaching from soil					
	Stage 1 Disir	nfectant/Disi	nfection I	By-Product (D	/DBP) I	aram	eters					
Chlorine (ppm)	2005	No	1.2¹	0.8 - 1.4	4	4	Water additives used to control microbes					
Haloacetic Acids (HAA) (ppb)	2005	No	20.2¹	7.5 - 34.95	NA	60	By-product of drinking water disinfection					
TTHM (ppb)	2005	No	54.5¹	ND - 86.9	NA	80	By-product of drinking water disinfection					
		Lead a	nd Coppe	er (Tap Water)								
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination					
Copper (tap water) (ppm)	2003	No	0.518	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives					
Lead (tap water) (ppb)	2003	No	1.96	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits					
		Second	ary Conta	ıminants Tabl	е							
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Result	Range of Results	MCLG	MCL	Likely Source of Contamination					
Odor (threshold odor number)	2005	Yes	14	1.2 - 14	NA	3	Natural occurrence from soil leaching					

<sup>1.</sup> Value is annual average

An odor violation occurred in December 2005 where the MCL for this parameter was exceeded. There are no serious health concerns associated with these results.

The state allows us to monitor some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

The Source Water Assessment and Protection Program (SWAPP) has completed an assessment and their records indicate no potential sources of contamination. Please see the following site to review the results. Http://www.dep.state.fl.us/swapp/SelectCounty.asp

<sup>2.</sup> Value is highest detected level

# **WATER QUALITY TESTING RESULTS - NORTHWEST**

Radiological Contaminants										
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination			
Alpha emitters (pCi/L)	3/02, 4/02, & 6/02	No	$6.9^{2}$	ND - 6.9	0	15	Erosion of natural deposits			
Radium 228 (pCi/L)	9/03	No	$0.7^{2}$	ND - 0.7	0	5	Erosion of natural deposits			
		In	organic C	ontaminants						
Barium (ppm)	05/05	No	0.0071	ND - 0.0084	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits			
Fluoride (ppm)	05/05	No	0.241	0.17 - 0.35	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories			
Lead (point of entry) (ppm)	5/05	No	0.00071	ND - 0.0022	NA	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder			
Nitrate (as Nitrogen) (ppm)	05/05	No	0.039¹	0.011 - 0.14	10	10	Run-off from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits			
Sodium (ppm)	05/05	No	18.1¹	9.3 - 32	NA	160	Salt water intrusion, leaching from soil			
	Stage 1 Disinfectant/Disinfection By-Product (D/DBP) Parameters									
Chlorine (ppm)	2005	No	1.8¹	1.2 - 2.4	4	4	Water additives used to control microbes			
Haloacetic Acids (HAA) (ppb)	2005	No	10.6¹	7.2 - 15.5	NA	60	By-product of drinking water disinfection			
TTHM (ppb)	2005	No	73.3¹	39.7 - 135	NA	80	By-product of drinking water disinfection			
		Lead	and Cop	per (Tap Wate	er)					
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination			
Copper (tap water) (ppm)	2005	No	0.65	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives			
Lead (tap water) (ppb)	2005	No	5.9	1	0	15	Corrosion of household plumbing systems, erosion of natural deposits			
		Secor	dary Con	taminants Ta	ble					
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Result	Range of Results	MCLG	MCL	Likely Source of Contamination			
Odor (threshold odor number)  1. Value is annual average	2005	Yes	14	1.2 - 14	NA	3	Natural occurrence from soil leaching			

<sup>1.</sup> Value is annual average

An odor violation occurred in November 2005 where the MCL for this parameter was exceeded. There are no serious health concerns associated with these results.

The state allows us to monitor some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

The Source Water Assessment and Protection Program (SWAPP) has completed an assessment and their records indicate no potential sources of contamination. Please see the following site to review the results. <a href="http://www.dep.state.fl.us/swapp/SelectCounty.asp">http://www.dep.state.fl.us/swapp/SelectCounty.asp</a>

<sup>2.</sup> Value is highest detected level

# **WATER QUALITY TESTING RESULTS - NORTHEAST**

		M	icrobiological Co	ntaminants			
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly % Positive Samples	MCLG	М	CL	Likely Source of Contamination
Total Coliform Bacteria	2005	No	1	0	bacteria in 5	of coliform 5% or more of samples	Naturally present in the environment
			Radiological Con	taminants			
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Alpha emitters (pCi/L)	9/03	No	0.1 <sup>2</sup>	ND - 0.1	0	5	Erosion of natural deposits
Radium 228 (pCi/L)	2/02	No	1.1 <sup>2</sup>	ND - 1.1	0	15	Erosion of natural deposits
			Inorganic Conta	minants			
Barium (ppm)	04/05	No	0.00791	0.0079	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	04/05	No	0.441	0.22 - 0.66	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead (point of entry) (ppb)	04/05	No	0.35¹	ND - 0.7	NA	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder
Mercury (pbb)	04/05	No	0.051	ND - 0.1	2	2	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland
Nitrate (as Nitrogen) (ppm)	04/05	No	0.0181	0.0087 - 0.025	10	10	Run-off from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	04/05	No	14.5¹	14.0 - 15.0	NA	160	Salt water intrusion, leaching from soil
(11 /	Stage 1	Disinfectan	t/Disinfection By-	Product (D/D	BP) Para	ameters	, ,
Chlorine (ppm)	2005	No	2.01	1.6-2.4	4	4	Water additives used to control microbes
Haloacetic Acids (HAA) (ppb)	2005	No	21.19¹	12.7 - 27.1	NA	60	By-product of drinking water disinfection
TTHM (ppb)	2005	No	59.4 <sup>1</sup>	29.0 - 90.7	NA	80	By-product of drinking water disinfection
		L	ead and Copper (	Tap Water)			
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination
Copper (tap water) (ppm)	2005	No	0.53	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)  1. Value is annual average	2005	No	4.4	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits

The state allows us to monitor some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

The Source Water Assessment and Protection Program (SWAPP) has completed an assessment and their records indicate no potential sources of contamination. Please see the following site to review the results. Http://www.dep.state.fl.us/swapp/SelectCounty.asp

<sup>2.</sup> Value is highest detected level

#### **WATER QUALITY TESTING RESULTS - MEREDITH MANOR**

	Radiological Contaminants										
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination				
Alpha emitters (pCi/l)	03/03	No	1.1	NA	0	15	Erosion of natural deposits				
Radium 228 (pCi/L)	03/03	No	1.1	NA	0	5	Erosion of natural deposits				
Inorganic Contaminants											
Barium (ppm)	03/03	No	0.0051	NA	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits				
Fluoride (ppm)	03/03	No	0.19	NA	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories				
Nitrate (as Nitrogen) (ppm)	06/05	No	0.0096	NA	10	10	Run-off from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits				
Sodium (ppm)	03/03	No	7.7	NA	NA	160	Salt water intrusion, leaching from soil				
	Stage 1 Disinfectant/Disinfection By-Product (D/DBP) Parameters										
Haloacetic Acids (HAA) (ppb)	09/05	No	11.5	NA	NA	60	By-product of drinking water disinfection				
TTHM (ppb)	09/05	No	56.4	NA	NA	80	By-product of drinking water disinfection				
		Lead	and Cop	per (Tap Wate	er)						
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination				
Copper (tap water) (ppm)	2005	No	0.22	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives				
Lead (tap water) (ppb)	2005	No	1.9	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits				
		Seco	ndary Coi	ntaminants Ta	ble						
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Result	Range of Results	MCLG	MCL	Likely Source of Contamination				
Odor (threshold odor number)	2003	Yes	23	1.1-23	NA	3	Natural occurrence from soil leaching				

<sup>1.</sup> Value is annual average

An odor violation occurred in 2003 where the MCL for this parameter was exceeded. There are no serious health concerns associated with these results.

The state allows us to monitor some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

<sup>2.</sup> Value is highest detected level

# **WATER QUALITY TESTING RESULTS - LAKE HARRIET**

	Radiological Contaminants										
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination				
Alpha emitters (pCi/l)	03/03	No	0.3	NA	0	15	Erosion of natural deposits				
Radium 228 (pCi/L)	03/03	No	0.9	NA	0	5	Erosion of natural deposits				
Inorganic Contaminants											
Barium (ppm)	03/03	No	0.0078	NA	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits				
Beryllium (ppb)	03/03	No	0.13	NA	4	4	Discharge from metal refineries and coal- burning factories: discharged from electronic, aerospace, and defense industries.				
Fluoride (ppm)	03/03	No	0.21	NA	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories				
Nitrate (as Nitrogen) (ppm)	06/05	No	0.016	NA	10	10	Run-off from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits				
Sodium (ppm)	03/03	No	5.6	NA	NA	160	Salt water intrusion, leaching from soil				
	Stage 1 Disin	fectant/Dis	infection	By-Product (D	D/DBP)	Paran	neters				
Haloacetic Acids (HAA) (ppb)	09/05	No	11.1	NA	NA	60	By-product of drinking water disinfection				
TTHM (ppb)	09/05	No	48.1	NA	NA	80	By-product of drinking water disinfection				
		Lead a	and Copp	er (Tap Water)	)						
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination				
Copper (tap water) (ppm)	2005	No	0.68	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives				
Lead (tap water) (ppb)	2005	No	3.9	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits				
		Second	lary Conta	aminants Tab	le						
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Result	Range of Results	MCLG	MCL	Likely Source of Contamination				
Odor (threshold odor number)  1. Value is annual average	2003	Yes	21	1.0-21	NA	3	Natural occurrence from soil leaching				

An odor violation occurred in 2003 where the MCL for this parameter was exceeded. There are no serious health concerns associated with these results.

The state allows us to monitor some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

The Source Water Assessment and Protection Program (SWAPP) has completed an assessment and their records indicate no Please potential sources of contamination. see the following site review the results. to Http://www.dep.state.fl.us/swapp/SelectCounty.asp

### **WATER QUALITY TESTING RESULTS - LAKE BRANTLEY**

		Radi	iological	Contaminants	S		
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination
Alpha emitters (pCi/l)	03/03	No	3.7	NA	0	15	Erosion of natural deposits
Radium 228 (pCi/L)	03/03	No	1.5	NA	0	5	Erosion of natural deposits
		Inc	rganic C	ontaminants			
Barium (ppm)	03/03	No	0.0092	NA	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride (ppm)	03/03	No	0.19	NA	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as Nitrogen) (ppm)	06/05	No	0.0067	NA	10	10	Run-off from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Sodium (ppm)	03/03	No	13	NA	NA	160	Salt water intrusion, leaching from soil
	Stage 1 Disin	fectant/Dis	sinfection	By-Product	(D/DBP	) Para	meters
Haloacetic Acids (HAA) (ppb)	09/05	No	13.5	NA	NA	60	By-product of drinking water disinfection
TTHM (ppb)	09/05	No	55.2	NA	NA	80	By-product of drinking water disinfection
		Lead	and Copp	oer (Tap Wate	r)		
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination
Copper (tap water) (ppm)	2005	No	0.1	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead (tap water) (ppb)	2005	No	3.1	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits
		Secon	dary Con	taminants Ta	ble		
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Result	Range of Results	MCLG	MCL	Likely Source of Contamination
Odor (threshold odor number)	2003	Yes	15	ND - 15	NA	3	Natural occurrence from soil leaching

<sup>1.</sup> Value is annual average

An odor violation occurred in 2003 where the MCL for this parameter was exceeded. There are no serious health concerns associated with these results.

The state allows us to monitor some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

The Source Water Assessment and Protection Program (SWAPP) has completed an assessment and their records indicate no potential sources of contamination. Please see the following site to review the results. <a href="http://www.dep.state.fl.us/swapp/SelectCounty.asp">http://www.dep.state.fl.us/swapp/SelectCounty.asp</a>

<sup>2.</sup> Value is highest detected level

#### **WATER QUALITY TESTING RESULTS - FERN PARK**

		Radio	ological Co	ntaminants							
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination				
Alpha emitters (pCi/l)	03/02	No	1.4 <sup>2</sup>	ND-1.4	0	15	Erosion of natural deposits				
Inorganic Contaminants											
Antimony (ppb)	3/05	No	2.0 <sup>2</sup>	ND - 2.0	6	6	Discharge from petroleum refineries, fire retardants, ceramics, electronics, solder				
Barium (ppm)	3/05	No	0.0161 <sup>2</sup>	0.00931 - 0.0161	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits				
Beryllium (ppb)	3/05 & 11/05	Yes	5.3 <sup>2</sup>	ND - 5.3	4	4	Discharge from metal refineries and coal burning factories; Discharge from electrical, aerospace and defense industries				
Cadmium (ppb)	3/05	No	0.14 <sup>2</sup>	0.05-0.14	5	5	Corrosion of galvanized pipes: erosion of natural deposit: discharge from metal refineries: run off from waste batteries and paints.				
Fluoride (ppm)	3/05	No	0.99 <sup>2</sup>	0.543 - 0.99	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories				
Nickel (ppb)	3/05	No	4.42 <sup>2</sup>	3.18 - 4.42	NA	100	Run-off from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits				
Nitrate (as Nitrogen) (ppm)	3/05 & 5/05	No	0.016 <sup>2</sup>	ND - 0.016	10	10	Run-off from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits				
Selenium (ppb)	3/05	No	1.22 <sup>2</sup>	ND - 1.22	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines				
Sodium (ppm)	3/05	No	5.19 <sup>2</sup>	4.39 - 5.19	NA	160	Salt water intrusion, leaching from soil				
	Stage 1 Di	sinfectant/Disi	nfection B	y-Product (D/DE	3P) Par	amete	rs				
Chlorine (ppm)	2005	No	0.9 <sup>1</sup>	0.2 - 1.9	4	4	Water additives used to control microbes				
Haloacetic Acids (HAA) (ppb)	7/05	No	16 <sup>1</sup>	9 - 27	NA	60	By-product of drinking water disinfection				
TTHM (ppb)	7/05	No	30 <sup>1</sup>	17 - 42	NA	80	By-product of drinking water disinfection				
		Lead a	ınd Coppei	r (Tap Water)							
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination				
Copper (tap water) (ppm)	8/05	No	0.32	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives				
Lead (tap water) (ppb)	8/05	No	1.7	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits				

<sup>1.</sup> Value is annual average

As a consecutive system the water that is provided to your area is purchased from another water utility, which is distributed by Seminole County. The following information provided in the table above reflects analysis performed by that utility. In March 2005, one sample exceeded the primary inorganic MCL for beryllium. The levels of beryllium are shown the Test Results Table. We were in monitoring violation for the 2nd and 3rd quarter of 2005, due to a sampling oversight. November 2005, we began beryllium testing for four consecutive quarters and since then we have been in compliance.

The state allows us to monitor some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

<sup>2.</sup> Value is highest detected level

# **WATER QUALITY TESTING RESULTS - DRUID HILLS**

		Microb	iological (	Contaminants					
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly # Positive	MCLG	MC	L	Likely Source of Contamination		
Total Coliform Bacteria	6/05	No	0	0	Presence of coliform bacteria in no more than one sample in a month		Naturally present in the environment		
		Radio	logical Co	ontaminants					
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination		
Alpha emitters (pCi/l)	03/03	No	1.2	NA	0	15	Erosion of natural deposits		
Radium 228 (pCi/L)	03/03	No	0.7	NA	0	5	Erosion of natural deposits		
		Inor	ganic Cor	ntaminants					
Barium (ppm)	03/03	No	0.011	NA	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits		
Fluoride (ppm)	03/03	No	0.95	NA	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories		
Lead (point of entry) (ppb)	03/03	No	6.1	NA	NA	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder		
Nitrate (as Nitrogen) (ppm)	03/05	No	0.001¹	ND - 0.011	10	10	Run-off from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits		
Nitrite (ppm)	03/05	No	0.0009¹	ND - 0.0045	1	1	Run-off from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits		
Sodium (ppm)	03/03	No	7.9	NA	NA	160	Salt water intrusion, leaching from soil		
	Stage 1 Disir	nfectant/Disi	nfection E	By-Product (D	/DBP) P	aram	eters		
Haloacetic Acids (HAA) (ppb)	09/05	No	14.5	NA	NA	60	By-product of drinking water disinfection		
TTHM (ppb)	09/05	No	65.2	NA	NA	80	By-product of drinking water disinfection		
Lead and Copper (Tap Water)									
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination		
Copper (tap water) (ppm)	2005	No	0.2	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives		
Lead (tap water) (ppb)  1. Value is annual average	2005	No	2.7	1	0	15	Corrosion of household plumbing systems, erosion of natural deposits		

<sup>1.</sup> Value is annual average

Due to insufficient coliform samples collection in June 2005 a microbiological monitoring report violation was issued.

The state allows us to monitor some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

The Source Water Assessment and Protection Program (SWAPP) has completed an assessment and their records indicate no potential sources of contamination. Please see the following site to review the results. <a href="http://www.dep.state.fl.us/swapp/SelectCounty.asp">http://www.dep.state.fl.us/swapp/SelectCounty.asp</a>

<sup>2.</sup> Value is highest detected leve

#### **WATER QUALITY TESTING RESULTS - DOL RAY MANOR**

Oates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Monthly # Positive Samples	MCLG								
04/05		1 Usitive Samples	MCLG	MCL Presence of				Likely Source of Contamination			
	No	1	0	coliform ba	acteria in han one	Naturally present in the environment					
Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination					
03/03	No	3.5	NA	0	15	Erosion of natural deposits					
03/03	No	0.7	NA	0	5	Erosion of natural deposits					
		Inorganic Conta	minants								
03/03	No	0.0047	NA	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits					
03/03	No	0.17	NA	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories					
03/03	No	2.4	NA	NA	15	Residue from man-made pollution such as auto emissions and paint; lead pipe, casing, and solder					
2005	No	2.21	1.5 - 3.0	10	10	Run-off from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits					
03/03	No	20	NA	NA	160	Salt water intrusion, leaching from soil					
Stage 1 Di	sinfectan	t/Disinfection By-	Product (D/DI	3P) Par	amete	ers					
09/05	No	1.87	NA	NA	60	By-product of drinking water disinfection					
09/05	No	13.1	NA	NA	100	By-product of drinking water disinfection					
		ead and Copper (									
Dates of Sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination					
2005	No	0.635	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives					
2005	No	1.6	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits					
	Se	condary Contami	nants Table								
Oates of Sampling (mo./yr.)	MCL Violation Y/N	Highest Result	Range of Results	MCLG	MCL	Likely Source of Contamination					
2003	Yes	11	ND-11	NA	3	Natural occurrence from soil leaching					
	03/03 03/03 03/03 03/03 03/03 03/03 03/03 2005 03/03 Stage 1 Di 09/05 09/05 2005 2005 2005	Pates of Sampling (mo./yr.)   MCL Violation Y/N	Radiological Contests of Sampling (mo./yr.)   MCL Violation Y/N   1.6	Radiological Contaminants	Radiological Contaminants	Radiological Contaminants					

<sup>1.</sup> Value is annual average

An odor violation occurred in 2003 where the MCL for this parameter was exceeded. There are no serious health concerns associated with these results.

The state allows us to monitor some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

The Source Water Assessment and Protection Program (SWAPP) has completed an assessment and their records indicate no potential sources of contamination. Please see the following site to review the results. <a href="http://www.dep.state.fl.us/swapp/SelectCounty.asp">http://www.dep.state.fl.us/swapp/SelectCounty.asp</a>

<sup>2.</sup> Value is highest detected level

#### WATER QUALITY TESTING RESULTS - CHASE GROVES

Radiological Contaminants											
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination				
Radium 228 (pCi/L)	6/18/02	No	$0.7^{2}$	0.6 - 0.7	0	5	Erosion of natural deposits				
Inorganic Contaminants											
Antimony (ppb)	6/15/05	No	1.4 <sup>2</sup>	ND - 1.4	6	6	Discharge from petroleum refineries, fire retardants, ceramics, electronics, solder				
Barium (ppm)	6/15/05	No	0.02 <sup>2</sup>	0.01 - 0.02	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits				
Fluoride (ppm)	6/15/05	No	0.847 <sup>2</sup>	0.617 - 0.847	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories				
Mercury (ppb)	6/15/05	No	0.1	NA	2	2	Erosion of natural deposits; Discharge form refineries and factories; Runoff from landfills; Runoff from cropland				
Nitrate (as Nitrogen) (ppm)	6/15/05	No	0.101 <sup>2</sup>	0.032 - 0.101	10	10	Run-off from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits				
Sodium (ppm)	6/15/05	No	24.42 <sup>1</sup>	20.2 - 24.4	NA	160	Salt water intrusion, leaching from soil				
Stage 1 Disinfectant/Disinfection By-Product (D/DBP) Parameters											
Chlorine (ppm)	2005	No	0.9 <sup>1</sup>	0.2 - 2.1	4	4	By-product of drinking water disinfection				
Haloacetic Acids (HAA) (ppb)	2005	No	15.28 <sup>1</sup>	2.86 - 14.75	NA	60	By-product of drinking water disinfection				
TTHM (ppb)	2005	No	44.87 <sup>1</sup>	29.33 - 49.13	NA	80	By-product of drinking water disinfection				
Lead and Copper (Tap Water)											
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination				
Copper (tap water) (ppm)	2004	No	0.12	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives				
Lead (tap water) (ppb)	2004	No	0.0026	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits				

<sup>1.</sup> Value is annual average

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<sup>2.</sup> Value is highest detected level

#### **WATER QUALITY TESTING RESULTS - SUNSHADOW**

Inorganic Contaminants											
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	MCL Violation Y/N	Level Detected	Range of Results	MCLG	MCL	Likely Source of Contamination				
Barium (ppm)	2/05	No	0.016 <sup>2</sup>	0.0086 - 0.016	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits				
Beryllium (ppm)	2/05	No	0.00018 <sup>2</sup>	0.00016 - 0.00018	4	4	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits				
Fluoride (ppm)	2/05	No	0.114 <sup>2</sup>	0.112 - 0.114	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories				
Nitrate (as Nitrogen) (ppm)	2/05	No	0.07 <sup>2</sup>	ND - 0.07	10	10	Run-off from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits				
Sodium (ppm)	2/05	No	18 <sup>2</sup>	12 - 18	NA	160	Salt water intrusion, leaching from soil				
Stage 1 Disinfectant/Disinfection By-Product (D/DBP) Parameters											
Chlorine (ppm)	2005	No	1.4 <sup>1</sup>	0.4 - 3.1	4	4	Water additives used to control microbes				
Haloacetic Acids (HAA) (ppb)	2005	No	28.3 <sup>1</sup>	16.1 - 35.3	NA	60	By-product of drinking water disinfection				
TTHM (ppb)	2005	No	50.7 <sup>1</sup>	15.1 - 74.1	NA	80	By-product of drinking water disinfection				
Lead and Copper (Tap Water)											
Contaminant and Unit of Measurement	Dates of Sampling (mo./yr.)	AL Violation Y/N	90th Percentile Result	No. of sampling sites exceeding the AL	MCLG	AL	Likely Source of Contamination				
Copper (tap water) (ppm)	2004	No	0.34	0	1.3	1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives				
Lead (tap water) (ppb)	2004	No	2.1	0	0	15	Corrosion of household plumbing systems, erosion of natural deposits				

<sup>1.</sup> Value is annual average

The state allows us to monitor some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

<sup>2.</sup> Value is highest detected level